

Method of Improving Post-Develop Photoresist Profile on a Deposited Dielectric Film

Abstract of the Disclosure

A method and apparatus for improving the post-development photoresist profile on a deposited dielectric film. The method includes depositing a TERA film having tunable optical and etch resistant properties on a substrate using a plasma-enhanced chemical vapor deposition process and post processing the TERA film using a plasma process. The apparatus includes a chamber having an upper electrode coupled to a first RF source and a substrate holder coupled to a second RF source; and a showerhead for providing multiple precursors and process gasses.